

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for measuring a halogen concentration comprising introducing a gas containing a halogen gas into a metal iodide-containing solution to liberate iodine, determining quantitatively the liberated iodine by measuring a visible light transmittance of the solution at a specific wavelength ranging from 460 nm to 520 nm, and calculating the halogen concentration in the gas from the quantity of iodine liberated.

2. (currently amended): ~~The~~A method for measuring a halogen concentration ~~according to claim 1, wherein the metal iodide-containing solution contains starch comprising~~
introducing a gas containing a halogen gas into metal iodide-containing solution which
further contains starch to liberate iodine, determining quantitatively the liberated iodine by
measuring a visible light transmittance of the solution at a specific wavelength, and
calculating the halogen concentration in the gas from the quantity of iodine liberated.

3. (canceled).

4. (original): The method for measuring a halogen concentration according to claim 2, wherein the specific wavelength ranges from 580 nm to 780 nm.

5. (currently amended): The method for measuring a halogen concentration according to claim ~~31~~ or 4, wherein the visible light is a laser beam.

6. (original): The method for measuring a halogen concentration according to claim 1 or 2, wherein the halogen gas is chlorine gas or fluorine gas.

7. (currently amended): A method for continuously measuring a halogen concentration, comprising introducing continuously a gas containing a halogen gas into a continuously flowing metal iodide-containing solution to liberate iodine, determining quantitatively the liberated iodine by measuring a visible light transmittance of the solution at a ~~specific~~ wavelength ranging from 460 nm to 520 nm, and calculating the halogen concentration in the gas from the quantity of iodine liberated.

8. (currently amended): ~~The~~A method for continuously measuring a halogen concentration ~~according to claim 7, wherein the metal iodide-containing solution contains starch~~ comprising introducing continuously a gas containing a halogen gas into a continuously flowing metal iodide-containing solution which further contains starch to liberate iodine, determining quantitatively the liberated iodine by measuring a visible light transmittance of the solution concentration in the gas from the quantity of iodine liberated.

9. (canceled).

10. (original): The method for continuously measuring a halogen concentration according to claim 8, wherein the specific wavelength ranges from 580 nm to 780 nm.

11. (currently amended): The method for continuously measuring a halogen concentration according to claim 9 or 10, wherein the visible light is a laser beam.

12. (original): The method for continuously measuring a halogen concentration according to claim 7 or 8, wherein the halogen gas is chlorine gas or fluorine gas.

Claims 13-38. (canceled).